



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,750	02/06/2004	Sreen A. Raghavan	9146.0006-00	5587

22852 7590 01/17/2007
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

TRAN, TUAN A

ART UNIT	PAPER NUMBER
----------	--------------

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/773,750

Applicant(s)

RAGHAVAN ET AL.

Examiner

Tuan A. Tran

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 5 is objected to because of the following informalities: the phrases "the ratio" and "the average gain value" should be changed to "a ratio" and "an average gain value" respectively for consistency. Appropriate correction is required.

Claim 6 is objected to because of the following informalities: the phrase "the ratio" should be changed to "a ratio" for consistency. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota (6,819,938) in view of Atarius (6,920,324).

Regarding claim 1, Sahota discloses a CDMA mobile unit 100 having a transceiver (See fig. 4) comprising: a receiver that can receive data on a plurality of channels from a transmission medium; a transmitter that can transmit data on the plurality of channels on the transmission medium (CDMA mobile unit is commonly known to bi-directionally communicate with CDMA base station (BTS) on a plurality of channels such as control channels or traffic channels); and a power balance that adjusts the power output on at least one of the plurality of channels by the transmitter

Art Unit: 2618

based on signals received from the receiver (See figs. 1,4 and col. 5 line 53 to col. 6 line 43). However, Sahota does not mention that the plurality of channels are frequency-separated channels. Since CDMA communication system supports channels around both 800 MHz and 1900 MHz frequency bands (frequency-separated channels) as well as CDMA mobile unit being capable of communicating at such frequency bands are known in the art as suggested by Atarius (See fig. 1 and col. 1 lines 37-39 and col. 3 lines 8-25); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system, as disclosed by Sahota, in accordance to Atarius' suggestion for the advantage of expanding the capability of the system (e.g. the mobile unit) to a variety of frequency spectrums.

Regarding claim 2, Sahota & Atarius disclose as cited in claim 1. Sahota further discloses the signals received from the receiver are gain values to amplifiers 18 amplifying signals down-converted from each of the plurality of frequency-separated channels, wherein the gain values are determined in response to data received from a complementary transmitter (BTS) transmitting through the transmission medium (See figs. 1, 4 and col. 5 line 66 to col. 6 line 6).

Claim 10 is rejected for the same reasons as cited in claim 2.

Regarding claim 3, Sahota & Atarius disclose as cited in claim 2. Sahota further discloses the gain values are determined in an automatic gain circuit (AGC loop 31) (See figs. 1, 4 and col. 2 lines 53-54 and col. 6 lines 1-6).

Regarding claim 4, Sahota & Atarius disclose as cited in claim 2. Sahota further discloses the power balance adjusts the power output by adjusting at least one gain of

at least one amplifier 122, 124 coupled to transmit signals on at least one of the plurality of frequency-separated channels (See fig. 4 and col. 6 lines 7-43).

Claim 9 is rejected for the same reasons as cited in claim 4, as method.

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota (6,819,938) in view of Atarius (6,920,324) as applied to claim 1 above, and further in view of Ozluturk et al. (5,841,768).

Regarding claim 8, Sahota & Atarius disclose as cited in claim 1. However, they do not explicitly mention that the power balance is enabled during a start-up process. Since Sahota does teach power control (by the power balance) includes open-loop and closed-loop power controls and Ozluturk suggests that open-loop and closed-loop power controls can be performed during a start-up process in a CDMA communication system (See figs. 11A, 11B and col. 10 lines 12-40); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the power balance during the start-up process, as suggested by Ozluturk, for the advantage of limiting interference to other subscriber unit during the establishment of communication channel.

Allowable Subject Matter

3. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, Sahota & Atarius disclose as cited in claim 4. However, they do not mention that the at least one gain is adjusted by multiplying the at least one gain by a ratio of a corresponding one of the gain values and an average gain value.

Regarding claim 6-7, Sahota & Atarius disclose as cited in claim 4. However, they do not mention that the at least one gain is adjusted by multiplying the at least one gain by a ratio of a corresponding one of the gain values and a threshold gain value.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Waldroup (6,070,058); Boesch (6,370,203); Lindroth (5,887,245); Hamilton (7,123,840); Kimppa (6,714,765); Matero (6,125,266); Ha (6,718,165); Shi (2004/0077326); Wheatley (5,267,262).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tuan Tran
AU 2618